

WHAT IS CLAIMED IS:

1. A system to improve the management of an individual's health, the system including:
 - a) a data measurement mechanism generating data relevant to a particular health condition;
 - b) a data acquisition mechanism transferring the data relevant to a particular health condition from the data measurement mechanism to a storage medium;
 - c) at least one data analysis mechanism generating insights relevant to a particular health condition wherein the data analysis mechanism performs at least one analysis selected from the group of: population comparison, multi-variate analysis, attribute data analysis, and reliability engineering analysis; and
 - d) an information presentation mechanism displaying the insights relevant to the particular health condition.
2. The system to improve the management of an individual's health according to claim 1 wherein the at least one data analysis mechanism further comprises Quality Window software.
3. The system to improve the management of an individual's health according to claim 1 wherein the at least one data analysis mechanism further comprises automatic or triggered recalculation of control limits based on top demonstrated historical performance.
4. The system to improve the management of an individual's health according to claim 1 wherein the reliability engineering analysis includes time between failures and failure duration.
5. The system to improve the management of an individual's health according to claim 1 wherein the at least one data measurement mechanism includes a sensor.

6. A system to improve the management of an individual's health, the system including:
 - a) a data measurement mechanism generating data relevant to a particular health condition;
 - b) at least one data acquisition mechanism transferring the data relevant to a particular health condition from the data measurement mechanism to a storage medium wherein the at least one data acquisition mechanism is selected from the group: a tablet PC, voice recognition, and telemetry based systems;
 - c) at least one data analysis mechanism generating insights relevant to a particular health condition; and
 - d) an information presentation mechanism displaying the insights relevant to the particular health condition.
7. The system to improve the management of an individual's health according to claim 6 wherein the at least one data acquisition mechanism includes a handheld device selected from the group: a PDA and a handheld PC.
8. A system to improve the management of an individual's health, the system including:
 - a) a data measurement mechanism generating data relevant to a particular health condition;
 - b) at least one data acquisition mechanism transferring the data relevant to a particular health condition from the data measurement mechanism to a storage medium;
 - c) at least one data analysis mechanism generating insights relevant to a particular health condition; and
 - d) an information presentation mechanism displaying the insights relevant to the particular health condition, wherein the at least one information

presentation mechanism is selected from the group: a graphical summary screen, an icon based summary screen, a help guide, an anthropomorphic help guide, and synthesized speech.

9. A method for improving the health of an individual including the steps of:
 - a) selecting at least one health parameter appropriate for the particular individual based on the individual's medical condition and medical history, current or recent health event(s) of interest, age and/or demographics, or any other health parameter of interest to the individual, caregiver, or medical professional;
 - b) measuring the at least one health parameter of interest and pertinent environmental or qualitative information to produce data;
 - c) acquiring the data for storage and subsequent analysis;
 - d) analyzing the data via at least one data analysis mechanism to define out-of-control situations requiring intervention, potential causes or remedies wherein the data analysis mechanism performs at least one analysis selected from the group of: population comparison, multi-variate analysis, attribute data analysis, and reliability engineering analysis;
 - e) presenting the information to the individual, caregiver, or medical professional.
10. The method for improving the health of an individual according to claim 9 wherein the information presented is selected from the group: statistical analysis, out-of-control points, control rules violations, specification violations, medical limit violations, medical condition related information, advertising for products related to the individual's medical condition or health event, help guides, summary screens.
11. A system for managing the health of a tympanic membrane of an individual, the system comprising a data acquisition mechanism including an image capture device for capturing a digital image of the tympanic membrane.

12. A system for managing the health of a tympanic membrane of an individual according to claim 11 further comprising a communication device to send the digital image for analysis at a remote location.

13. A system for managing the health of a tympanic membrane of an individual according to claim 11 further comprising:
 - an otoscope having a power source and a light source;
 - an image acquisition tip;
 - a data storage mechanism;
 - a communication port selected from the group: a phone jack, a USB port, a serial port, and a parallel port; and
 - an image capture mechanism selected from the group: a CCD image sensor, a CMOS image sensor, a digital camera, and a color board camera.